

WO 00/24911

SEQUENCE LISTING

<110> INCYTE PHARMACEUTICALS, INC.
HILLMAN, Jennifer L.
BANDMAN, Olga
GUEGLER, Karl J.
CORLEY, Neil C.
BAUGHN, Mariah R.
AZIMZAI, Yalda
LAL, Preeti
LY, Dyung Aina M.

<120> HUMAN PHOSPHOLIPASES

<130> PF-0625 PCT

<140> To Be Assigned
<141> Herewith

<150> 09/181,317; unassigned; 09/234,726; unassigned
<151> 1998-10-27; 1998-10-27; 1999-01-21; 1999-01-21

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<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2641779CD1

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Gln Val Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly
35 40 45
Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr
50 55 60
Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys
65 70 75
Thr Gln Gly Cys Gly Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe
80 85 90
Ser Gln Gly Asn Ile His Cys Ser Asp Lys Gly Ser Trp Cys Glu
95 100 105
Gln Gln Leu Cys Ala Cys Asp Lys Glu Val Ala Phe Cys Leu Lys
110 115 120
Arg Asn Leu Asp Thr Tyr Gln Lys Arg Leu Arg Phe Tyr Trp Arg
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Pro His Cys Arg Gly Gln Thr Pro Gly Cys
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<210> 2
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Arg	Val	Ala	Ser	His	Leu	Thr	Asp	Thr	Gly	Leu	Leu	Val	Leu	Phe	20	25	30	
Cys	Pro	Ala	Pro	Cys	Pro	Phe	Phe	Phe	Phe	Phe	Glu	Met	Glu	Ser	35	40	45	
Leu	Ser	Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asp	Leu	Gly	Ser	50	55	60	
Leu	Gln	Pro	Pro	Pro	Leu	Gly	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	65	70	75	
Leu	Pro	Ser	Ser	Trp	Asp	Tyr	Arg	Leu	Arg	Glu	Leu	Ala	Val	Arg	80	85	90	
Leu	Gly	Phe	Gly	Pro	Cys	Ala	Glu	Glu	Gln	Ala	Phe	Leu	Ser	Arg	95	100	105	
Arg	Lys	Gln	Val	Val	Ala	Ala	Ala	Leu	Arg	Gln	Ala	Leu	Gln	Leu	110	115	120	
Asp	Gly	Asp	Leu	Gln	Glu	Asp	Glu	Ile	Pro	Val	Val	Ala	Ile	Met	125	130	135	
Ala	Thr	Gly	Gly	Gly	Ile	Arg	Ala	Met	Thr	Ser	Leu	Tyr	Gly	Gln	140	145	150	
Leu	Ala	Gly	Leu	Lys	Glu	Leu	Gly	Leu	Leu	Asp	Cys	Val	Ser	Tyr	155	160	165	
Ile	Thr	Gly	Ala	Ser	Gly	Ser	Thr	Trp	Ala	Leu	Ala	Asn	Leu	Tyr	170	175	180	
Glu	Asp	Pro	Glu	Trp	Ser	Gln	Lys	Asp	Leu	Ala	Gly	Pro	Thr	Glu	185	190	195	
Leu	Leu	Lys	Thr	Gln	Val	Thr	Lys	Asn	Lys	Leu	Gly	Val	Leu	Ala	200	205	210	
Pro	Ser	Gln	Leu	Gln	Arg	Tyr	Arg	Gln	Glu	Leu	Ala	Glu	Arg	Ala	215	220	225	
Arg	Leu	Gly	Tyr	Pro	Ser	Cys	Phe	Thr	Asn	Leu	Trp	Ala	Leu	Ile	230	235	240	
Asn	Glu	Ala	Leu	Leu	His	Asp	Glu	Pro	His	Asp	His	Lys	Leu	Ser	245	250	255	
Asp	Gln	Arg	Glu	Ala	Leu	Ser	His	Gly	Gln	Asn	Pro	Leu	Pro	Ile	260	265	270	
Tyr	Cys	Ala	Leu	Asn	Thr	Lys	Gly	Gln	Ser	Leu	Thr	Thr	Phe	Glu	275	280	285	
Phe	Gly	Glu	Trp	Cys	Glu	Phe	Ser	Pro	Tyr	Glu	Val	Gly	Phe	Pro	290	295	300	

Lys Tyr Gly Ala Phe Ile Pro Ser Glu Leu Phe Gly Ser Glu Phe		
305	310	315
Phe Met Gly Gln Leu Met Lys Arg Leu Pro Glu Ser Arg Ile Cys		
320	325	330
Phe Leu Glu Gly Ile Trp Ser Asn Leu Tyr Ala Ala Asn Leu Gln		
335	340	345
Asp Ser Leu Tyr Trp Ala Ser Glu Pro Ser Gln Phe Trp Asp Arg		
350	355	360
Trp Val Arg Asn Gln Ala Asn Leu Asp Lys Glu Gln Val Pro Leu		
365	370	375
Leu Lys Ile Glu Glu Pro Pro Ser Thr Ala Gly Arg Ile Ala Glu		
380	385	390
Phe Phe Thr Asp Leu Leu Thr Trp Arg Pro Leu Ala Gln Ala Thr		
395	400	405
His Asn Phe Leu Arg Gly Leu His Phe His Lys Asp Tyr Phe Gln		
410	415	420
His Pro His Phe Ser Thr Trp Lys Ala Thr Thr Leu Asp Gly Leu		
425	430	435
Pro Asn Gln Leu Thr Pro Ser Glu Pro His Leu Cys Leu Leu Asp		
440	445	450
Val Gly Tyr Leu Ile Asn Thr Ser Cys Leu Pro Leu Leu Gln Pro		
455	460	465
Thr Arg Asp Val Asp Leu Ile Leu Ser Leu Asp Tyr Asn Leu His		
470	475	480
Gly Ala Phe Gln Gln Leu Gln Leu Leu Gly Arg Phe Cys Gln Glu		
485	490	495
Gln Gly Ile Pro Phe Pro Pro Ile Ser Pro Ser Pro Glu Glu Gln		
500	505	510
Leu Gln Pro Arg Glu Cys His Thr Phe Ser Asp Pro Thr Cys Pro		
515	520	525
Gly Ala Pro Ala Val Leu His Phe Ser Ser Gly Val Arg Arg Thr		
530	535	540
Pro Glu Glu Ala Ala Ala Gly Glu Val Asn Leu Ser Ser Ser Asp		
545	550	555
Ser Pro Tyr His Tyr Thr Lys Val Thr Tyr Ser Gln Glu Asp Val		
560	565	570
Asp Lys Leu Leu His Leu Thr His Tyr Asn Val Cys Asn Asn Gln		
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<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1316804CD1

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Ile	Leu	Trp	Leu	Ser	Val	Gly	Ser	Ser	Gly	Asp	Ala	Pro	Pro	Thr
				20					25					30
Pro	Gln	Pro	Lys	Cys	Ala	Asp	Phe	Gln	Ser	Ala	Asn	Leu	Phe	Glu
				35					40					45
Gly	Thr	Asp	Leu	Lys	Val	Gln	Phe	Leu	Leu	Phe	Val	Pro	Ser	Asn
				50					55					60
Pro	Ser	Cys	Gly	Gln	Leu	Val	Glu	Gly	Ser	Ser	Asp	Leu	Gln	Asn
				65					70					75
Ser	Gly	Phe	Asn	Ala	Thr	Leu	Gly	Thr	Lys	Leu	Ile	Ile	His	Gly
				80					85					90
Phe	Arg	Val	Leu	Gly	Thr	Lys	Pro	Ser	Trp	Ile	Asp	Thr	Phe	Ile
				95					100					105
Arg	Thr	Leu	Leu	Arg	Ala	Thr	Asn	Ala	Asn	Val	Ile	Ala	Val	Asp
				110					115					120
Trp	Ile	Tyr	Gly	Ser	Thr	Gly	Val	Tyr	Phe	Ser	Ala	Val	Lys	Asn
				125					130					135
Val	Ile	Lys	Leu	Ser	Leu	Glu	Ile	Ser	Leu	Phe	Leu	Asn	Lys	Leu
				140					145					150
Leu	Val	Leu	Gly	Val	Ser	Glu	Ser	Ser	Ile	His	Ile	Ile	Gly	Val
				155					160					165
Ser	Leu	Gly	Ala	His	Val	Gly	Gly	Met	Val	Gly	Gln	Leu	Phe	Gly
				170					175					180
Gly	Gln	Leu	Gly	Gln	Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Glu
				185					190					195
Tyr	Thr	Arg	Ala	Ser	Val	Glu	Glu	Arg	Leu	Asp	Ala	Gly	Asp	Ala
				200					205					210
Leu	Phe	Val	Glu	Ala	Ile	His	Thr	Asp	Thr	Asp	Asn	Leu	Gly	Ile
				215					220					225
Arg	Ile	Pro	Val	Gly	His	Val	Asp	Tyr	Phe	Val	Asn	Gly	Gly	Gln
				230					235					240
Asp	Gln	Pro	Gly	Cys	Pro	Thr	Phe	Phe	Tyr	Ala	Gly	Tyr	Ser	Tyr
				245					250					255
Leu	Ile	Cys	Asp	His	Met	Arg	Ala	Val	His	Leu	Tyr	Ile	Ser	Ala
				260					265					270
Leu	Glu	Asn	Ser	Cys	Pro	Leu	Met	Ala	Phe	Pro	Cys	Ala	Ser	Tyr
				275					280					285
Lys	Ala	Phe	Leu	Ala	Gly	Arg	Cys	Leu	Asp	Cys	Phe	Asn	Pro	Phe
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Leu	Leu	Ser	Cys	Pro	Arg	Ile	Gly	Leu	Val	Glu	Gln	Gly	Gly	Val
				305					310					315
Lys	Ile	Glu	Pro	Leu	Pro	Lys	Glu	Val	Lys	Val	Tyr	Leu	Leu	Thr
				320					325					330
Thr	Ser	Ser	Ala	Pro	Tyr	Cys	Met	His	His	Ser	Leu	Val	Glu	Phe
				335					340					345
His	Leu	Lys	Glu	Leu	Arg	Asn	Lys	Asp	Thr	Asn	Ile	Glu	Val	Thr
				350					355					360
Phe	Leu	Ser	Ser	Asn	Ile	Thr	Ser	Ser	Ser	Lys	Ile	Thr	Ile	Pro
				365					370					375
Lys	Gln	Gln	Arg	Tyr	Gly	Lys	Gly	Ile	Ile	Ala	His	Ala	Thr	Pro
				380					385					390
Gln	Cys	Gln	Ile	Asn	Gln	Val	Lys	Phe	Lys	Phe	Gln	Ser	Ser	Asn
				395					400					405

Arg	Val	Trp	Lys	Lys	Asp	Arg	Thr	Thr	Ile	Ile	Gly	Lys	Phe	Cys	
			410						415					420	
Thr	Ala	Leu	Leu	Pro	Val	Asn	Asp	Arg	Glu	Lys	Met	Val	Cys	Leu	
			425						430					435	
Pro	Glu	Pro	Val	Asn	Leu	Gln	Ala	Ser	Val	Thr	Val	Ser	Cys	Asp	
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Leu	Lys	Ile	Ala	Cys	Val										
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<210> 4

<211> 592

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2641779CB1

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tggcagaggc caaccctaaag atgccacgga ctgggtgctgc cagacccatg actgctgcta 240
tgaccacctg aagaccaggg ggtgcggcat ctacaaggac tattacagat acaacttttc 300
ccaggggaac atccactgct ctgacaaggg aagctgggtg gagcagcagc tgtgtgcctg 360
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tttctactgg cggcccccact gccgggggca gaccttggg tgctagaagc ccacacctc 480
tacctgttct ctcagcatgg agctctggca tccccacctc agtatctaac ctgaaccagc 540
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<210> 5

<211> 2204

<212> DNA

<213> Homo sapiens

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<221> unsure

<222> 28, 30

<223> a or g or c or t, unknown, or other

<220>

<221> misc_feature

<223> Incyte ID No: 1430683CB1

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cctggccctc tgtcttgaga gagggtcttc tcacctcaca gacacaggat tattggctct 180
tttctgcccc gccccttgcc cttttttttt tttttttgag atggagtctc tctctgtcgc 240
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cccagtggta gctattatgg ccactgggtg tgggatccgg gcaatgactt ccctgtatgg 540
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<210> 6

<211> 1746

<212> DNA

<213> Homo sapiens

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<223> Incyte ID No: 1316804CB1

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gccccagtgc gctgacttcc agagcgccaa cctttttgaa ggcaccgatc tcaaagtcca 180
gtttctctc tttgtccctt cgaatcctag ctgtgggcag ctagtagaag gaagcagtga 240
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cgtggaagcc atccacacag acaccgacaa tttgggtatt cggattcccg ttggacatgt 720
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<210> 7

<211> 146

<212> PRT

<213> Rattus norvegicus

<300>

<308> g204319

<400> 7

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                20                      25                      30
Leu Phe Lys Thr Gly Lys Arg Ala Asp Val Ser Tyr Gly Phe Tyr
                35                      40                      45
Gly Cys His Cys Gly Val Gly Gly Arg Gly Ser Pro Lys Asp Ala
                50                      55                      60
Thr Asp Trp Cys Cys Val Thr His Asp Cys Cys Tyr Asn Arg Leu
                65                      70                      75
Glu Lys Arg Gly Cys Gly Thr Lys Phe Leu Thr Tyr Lys Phe Ser
                80                      85                      90
Tyr Arg Gly Gly Gln Ile Ser Cys Ser Thr Asn Gln Asp Ser Cys
                95                      100                     105
Arg Lys Gln Leu Cys Gln Cys Asp Lys Ala Ala Ala Glu Cys Phe
                110                     115                     120
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<210> 8

<211> 748

<212> PRT

<213> Gallus gallus

<300>

<308> g508625

<400> 8

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Thr	Lys	Gly	Ala	Ile	Gly	Asp	Met	Leu	Asp	Thr	Pro	Asp	Pro	Tyr
				35					40					45
Val	Glu	Leu	Phe	Ile	Pro	Ser	Ala	Pro	Asp	Cys	Arg	Lys	Arg	Thr
				50					55					60
Lys	His	Phe	Asn	Asn	Asp	Val	Asn	Pro	Val	Trp	Asn	Glu	Thr	Phe
				65					70					75
Glu	Phe	Ile	Leu	Asp	Pro	Asn	Gln	Asp	Asn	Val	Leu	Glu	Val	Thr
				80					85					90
Leu	Met	Asp	Ala	Asn	Tyr	Val	Met	Asp	Glu	Thr	Leu	Gly	Met	Ala
				95					100					105
Thr	Phe	Pro	Ile	Ser	Ser	Leu	Lys	Leu	Gly	Glu	Lys	Lys	Glu	Val
				110					115					120
Gln	Leu	Thr	Phe	Asn	Asn	Val	Thr	Glu	Met	Thr	Leu	Glu	Leu	Ser
				125					130					135
Leu	Glu	Val	Cys	Ser	Ser	Thr	Asp	Leu	Arg	Phe	Ser	Met	Ala	Leu
				140					145					150
Cys	Asp	Glu	Glu	Lys	Lys	Phe	Arg	Gln	Gln	Arg	Lys	Asp	Asn	Ile
				155					160					165
Met	Gln	Ser	Met	Lys	Ser	Phe	Leu	Gly	Glu	Glu	Asn	Ser	Lys	Asn
				170					175					180
Leu	Thr	Thr	Ser	Arg	Asp	Val	Pro	Val	Ile	Ala	Val	Leu	Gly	Ser
				185					190					195
Gly	Gly	Gly	Phe	Arg	Ala	Met	Val	Gly	Phe	Ala	Gly	Val	Met	Lys
				200					205					210
Ala	Leu	Tyr	Glu	Ser	Gly	Val	Leu	Asp	Cys	Ala	Thr	Tyr	Ile	Ala
				215					220					225
Gly	Leu	Ser	Gly	Ser	Thr	Trp	Tyr	Met	Ser	Thr	Leu	Tyr	Ser	His
				230					235					240
Pro	Asp	Phe	Pro	Glu	Lys	Gly	Pro	Lys	Glu	Ile	Asn	Gln	Glu	Leu
				245					250					255
Met	Asn	Ser	Val	Ser	His	Asn	Pro	Leu	Leu	Leu	Leu	Thr	Pro	Gln
				260					265					270
Lys	Val	Lys	Arg	Tyr	Ile	Glu	Ala	Leu	Trp	Asn	Lys	Lys	Ser	Ser
				275					280					285
Gly	Gln	Pro	Val	Thr	Phe	Thr	Asp	Ile	Phe	Gly	Met	Leu	Ile	Gly
				290					295					300
Glu	Thr	Leu	Ile	His	Asn	Arg	Met	Asp	Thr	Thr	Leu	Ser	Asp	Met
				305					310					315
Lys	Glu	Lys	Val	Ser	Glu	Ala	Gln	Cys	Ala	Leu	Pro	Leu	Phe	Thr
				320					325					330
Cys	Leu	His	Val	Lys	Pro	Asp	Val	Ser	Glu	Leu	Met	Phe	Ala	Asp
				335					340					345
Trp	Val	Glu	Phe	Ser	Pro	Tyr	Glu	Ile	Gly	Met	Ala	Lys	Tyr	Gly
				350					355					360
Thr	Phe	Met	Ser	Pro	Asp	Leu	Phe	Gly	Ser	Lys	Phe	Phe	Met	Gly
				365					370					375

Thr Val Val Lys	Lys Tyr Ser Glu Asn	Pro Leu His Phe Leu	Met
380	385		390
Gly Val Trp Gly	Ser Ala Phe Ser Ile	Leu Phe Asn Arg Val	Leu
395	400		405
Gly Val Ser Asn	Ser Gln Asn Lys Gly	Pro Thr Met Glu Glu	Glu
410	415		420
Leu Glu Asn Ile	Arg Leu Lys His Leu	Val Ser Asn Asp Ser	Ser
425	430		435
Asp Ser Glu Asp	Glu Ser Gln His Pro	Lys Gly Thr Glu Asn	Ser
440	445		450
Glu Ala Asn Glu	Glu Tyr Gln Asn Ser	Ser Gln Glu Ser Trp	Val
455	460		465
Gln Arg Met Leu	Met Ala Leu Val Gly	Asp Ser Ala Leu Phe	Asn
470	475		480
Thr Arg Glu Gly	Arg Ala Gly Lys Val	His Asn Phe Met Leu	Gly
485	490		495
Leu Asn Leu Asn	Ser Cys Tyr Pro Leu	Ser Pro Leu Ala Asp	Leu
500	505		510
Leu Thr Gln Glu	Ser Val Glu Glu Asp	Glu Leu Asp Ala Ala	Val
515	520		525
Ala Asp Pro Asp	Glu Phe Glu Arg Ile	Tyr Glu Pro Leu Asp	Val
530	535		540
Lys Ser Lys Lys	Ile His Ile Val Asp	Ser Gly Leu Thr Phe	Asn
545	550		555
Leu Pro Tyr Pro	Leu Ile Leu Arg Pro	Gln Arg Gly Val Asp	Leu
560	565		570
Ile Ile Ser Phe	Asp Phe Ser Ala Arg	Pro Ser Asp Ser Ser	Pro
575	580		585
Pro Phe Lys Glu	Ile Leu Leu Ala Glu	Lys Trp Ala Lys Met	Asn
590	595		600
Lys Leu Pro Phe	Pro Lys Ile Asp Pro	Asn Val Phe Asp Arg	Glu
605	610		615
Gly Leu Lys Glu	Cys Tyr Val Phe Lys	Pro Lys Asp Thr Ser	Ser
620	625		630
Glu Lys Asp Cys	Pro Thr Ile Ile His	Phe Val Leu Ala Asn	Ile
635	640		645
Asn Phe Arg Lys	Tyr Lys Ala Pro Gly	Leu Pro Arg Glu Ser	Lys
650	655		660
Glu Glu Lys Asp	Phe Ala Asp Phe Asp	Ile Phe Asp Asp Pro	Asn
665	670		675
Thr Pro Phe Ser	Thr Phe Asn Phe Gln	Tyr Pro Asn Glu Ala	Phe
680	685		690
Lys Arg Leu His	Asp Leu Met Glu Phe	Asn Thr Leu Asn Asn	Leu
695	700		705
Asp Val Ile Lys	Gln Ala Met Met Glu	Ser Ile Glu Tyr Arg	Lys
710	715		720
Glu Asn Pro Ser	Arg Cys Ser Val Ser	Leu Ser Ser Val Glu	Ala
725	730		735
Arg Arg Phe Phe	Asn Lys Asn Asn Leu	Asn Asn His Thr	
740	745		

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<211> 456

<212> PRT

<213> Rattus norvegicus

<300>

<308> g1817556

<400> 9

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Leu	Leu	Trp	Leu	Ser	Ile	Gly	Arg	Ser	Gly	Asn	Val	Pro	Pro	Thr	20	25	30	35
Thr	Gln	Pro	Lys	Cys	Thr	Asp	Phe	Gln	Ser	Ala	Asn	Leu	Leu	Arg	40	45	50	55
Gly	Thr	Asn	Leu	Lys	Val	Gln	Phe	Leu	Leu	Phe	Thr	Pro	Ser	Asp	60	65	70	75
Pro	Gly	Cys	Gly	Gln	Leu	Val	Glu	Glu	Asp	Ser	Asp	Ile	Arg	Asn	80	85	90	95
Ser	Glu	Phe	Asn	Ala	Ser	Leu	Gly	Thr	Lys	Leu	Ile	Ile	His	Gly	100	105	110	115
Phe	Arg	Ala	Leu	Gly	Thr	Lys	Pro	Ser	Trp	Ile	Asn	Lys	Phe	Ile	120	125	130	135
Arg	Ala	Leu	Leu	Arg	Ala	Ala	Asp	Ala	Asn	Val	Ile	Ala	Val	Asp	140	145	150	155
Trp	Val	Tyr	Gly	Ser	Thr	Gly	Met	Tyr	Phe	Ser	Ala	Val	Glu	Asn	160	165	170	175
Val	Val	Lys	Leu	Ser	Leu	Glu	Ile	Ser	Arg	Phe	Leu	Ser	Lys	Leu	180	185	190	195
Leu	Glu	Leu	Gly	Val	Ser	Glu	Ser	Ser	Ile	His	Ile	Ile	Gly	Val	200	205	210	215
Ser	Leu	Gly	Ala	His	Val	Gly	Gly	Met	Val	Gly	His	Phe	Tyr	Lys	220	225	230	235
Gly	Gln	Leu	Gly	Arg	Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Glu	240	245	250	255
Tyr	Thr	Arg	Ala	Ser	Leu	Glu	Glu	Arg	Leu	Asp	Ser	Gly	Asp	Ala	260	265	270	275
Leu	Phe	Val	Glu	Ala	Ile	His	Thr	Asp	Thr	Asp	Asn	Leu	Gly	Ile	280	285	290	295
Arg	Ile	Pro	Val	Gly	His	Val	Asp	Tyr	Phe	Val	Asn	Gly	Gly	Gln	300	305	310	315
Asp	Gln	Pro	Gly	Cys	Pro	Ala	Phe	Ile	His	Ala	Gly	Tyr	Ser	Tyr	320	325	330	335
Leu	Ile	Cys	Asp	His	Met	Arg	Ala	Val	His	Leu	Tyr	Ile	Ser	Ala	340	345	350	355
Leu	Glu	Asn	Thr	Cys	Pro	Leu	Met	Ala	Phe	Pro	Cys	Ala	Ser	Tyr				
Lys	Ala	Phe	Leu	Ala	Gly	Asp	Cys	Leu	Asp	Cys	Phe	Asn	Pro	Phe				
Leu	Leu	Ser	Cys	Pro	Arg	Ile	Gly	Leu	Val	Glu	Arg	Gly	Gly	Val				
Lys	Ile	Glu	Pro	Leu	Pro	Lys	Glu	Val	Arg	Val	Tyr	Leu	Gln	Thr				
Thr	Ser	Ser	Ala	Pro	Tyr	Cys	Val	His	His	Ser	Leu	Val	Glu	Phe				
Asn	Leu	Lys	Glu	Lys	Arg	Lys	Lys	Asp	Thr	Ser	Ile	Glu	Val	Thr				

Phe	Leu	Gly	Asn	Asn	Val	Thr	Ser	Ser	Val	Lys	Ile	Thr	Ile	Pro
				365						370				375
Lys	Asp	His	Leu	Glu	Gly	Arg	Gly	Ile	Ile	Ala	His	Gln	Asn	Pro
				380						385				390
His	Cys	Gln	Ile	Asn	Gln	Val	Lys	Leu	Lys	Phe	His	Ile	Ser	Ser
				395						400				405
Arg	Val	Trp	Arg	Lys	Asp	Arg	Thr	Pro	Ile	Val	Gly	Thr	Phe	Cys
				410						415				420
Thr	Ala	Pro	Leu	Pro	Val	Asn	Asp	Ser	Lys	Lys	Thr	Val	Cys	Ile
				425						430				435
Pro	Glu	Pro	Val	Arg	Leu	Gln	Val	Ser	Met	Ala	Val	Leu	Arg	Asp
				440						445				450
Leu	Lys	Met	Ala	Cys	Val									
				455										

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<212> PRT

<213> Homo sapiens

<220>

<221> unsure

<222> 2, 4

<223> unknown, or other

<220>

<221> misc_feature

<223> motif

<400> 10

Gly	Xaa	Ser	Xaa	Gly
1				5